

Application For Research Grant

#203R1

cf. #89

activated 10/1/55

renewed 7/1/56

#168

activated 9/1/57

#203

activated 9/1/58

Date: May 11, 1959

1. Name of Investigator: Dr. Caroline Bedell Thomas
2. Title: Associate Professor of Medicine
3. Institution & Address: The Johns Hopkins School of Medicine  
710 North Washington Street  
Baltimore 5, Maryland
4. Project or Subject:
  - a. Studies of Genetic Differences between Smokers and Nonsmokers.
  - b. Studies of Psychological Differences between Smokers and Nonsmokers as Shown by Comparison of Figure Drawings.
5. Detailed Plan of Procedure:

The background for our future plans may be found in Attachments I, II and III. Attachment I gives the original plan for the two year study as presented in our application to the TIRC in 1958. Attachment II indicates briefly the progress made in each phase of the present studies this year. Attachment III summarizes progress made in 1958-1959 in our over-all program and lists the publications. In III, note particularly sections A4; C2, 3, 4 and 5; E2a and b, 3a, 4a, and 5 a and b. The paper listed in 3a has now been published, but reprints have not yet been received. Work is in progress on 5a and b; it is hoped that these papers will both be submitted for publication before September, 1959. Reprints for the papers listed under 2a and b are attached. The latter work was not primarily supported by the TIRC nor did Dr. Murphy (the part-time Fellow supported by the TIRC) have any part in the design or execution of the experiment or in the writing of the paper per se. His contribution was to make a statistical analysis of the data in Table III at a time when other statistical assistance was not available.

Plans for the coming year:

A. Studies of Genetic Differences between Smokers and Nonsmokers.

1. to continue the orderly collection of data from blood donors as has been done this year (see Attachment II).
2. to try out taking smoking histories by a self-administered questionnaire (see card at end of Attachment II) rather than by interview. If this proves satisfactory, the data on blood groups in smokers versus nonsmokers can be expanded to include many more donors than it is possible to interview. (Our interviewers are at the Blood Bank about 4 hours a day five days a week.)

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3. to make a preliminary analysis of the data thus far collected in the near future in order to obtain an estimate of the total number of subjects it will be desirable to include in the entire study.
4. when data collection has been completed, to make a statistical analysis of the results and write them up.

B. Studies of the Psychological Differences between Smokers and Nonsmokers as Shown by Comparison of Figure Drawings.

1. to complete the preliminary study with Dr. Greenberg described in Attachment IIB.
2. to make a statistical analysis of the smoker-nonsmoker comparisons for the variables coded on IBM cards (see Attachment IIB).
3. to incorporate the results of these two studies into one or two papers.

6. Budget Plan:

Salaries	5,500.00
Expendable Supplies	222.25
Permanent Equipment	
Overhead (15%)	1,500.00
Other	4,278.75
Total	\$11,500.00

7. Anticipated Duration of Work: one year.

8. Facilities and Staff Available: Dr. C. Lockard Conley and Dr. Julius R. Krevans, who are in charge of the blood bank have given us permission to make use of blood bank donors and blood group data in the manner indicated. There is ample work space available in conjunction with our major project. During the next two years, we shall have a full-time statistician working with us. A part-time psychologist is already on our staff.

9. Additional Requirements: none.

10. Additional Information (Including relation of work to other projects and other sources of supply):

The aims of the project outlined above are in harmony with those of Grant H-1891 (C5) entitled "Precursors of Hypertension and Coronary Artery Disease" awarded by the National Heart Institute. The funds from that source do not include most of the items covered by the budget given above. Where similar items exist in each of the two budgets, it is because the budget from Grant H-1891 (C5) is insufficient to meet the total expense of a given item, and the two budgets will be used in such a way that they supplement each other.

Signature Caroline Bedell Thomas  
Director of Project

Business Officer of the Institution

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